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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/399,682	09/21/1999	KEHSING J. CHOU	A8009	2544

7590

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EXAMINER

PHAM, HUNG Q

ART UNIT

PAPER NUMBER

2172

DATE MAILED: 09/25/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/399,682

Applicant(s)

CHOU ET AL.

Examiner

HUNG Q PHAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 8 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 8 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 8 and 15 were amended with *a schema structural view* to distinguish data from a plurality of datastores and *a unified schema structural view* for the given federated data source. However, there is no description of *a schema structural view* and *a unified schema structural view*, except a *unified schema conceptual view* is mentioned in the specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. **Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al. [USP 6,263,342 B1]. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.**

Regarding to claims 1, 8 and 15, Chang teaches a computer method and system capable of searching multiple heterogeneous datastores with heterogeneous data types by employing an object oriented data model to define a federated datastore object. As shown in FIG. 9, the federated datastore 37 as *a given federated data source* coordinates query evaluation, data-access, and transaction processing of the participating datastores (Col. 40, lines 38-57). In other words, *a given federated data source receives a request for data*. By using the federated schema, a multi-search query can be formulated, executed, and coordinated to produce results in the form of a datastore-neutral dynamic data object (Col. 40, lines 57-60). As shown in FIG. 2, a FederatedQuery 19 is a concrete implementation of Query 13 which delegates the processing task to each of the native datastores or to its associated federated datastore 37. This query can be a combination of a DL parametric query, OnDemand query, and other query types involving supported datastores. The query is translated into several native queries, one for each of the native datastores, submit them for processing and collect the result, which is a federated collection object 8. (Col. 21, lines 44-59). As shown in FIG. 8 is federated collection 8 or a collection containing Results objects 6, which may come from several heterogeneous datastores 9. Each Results 6 contains the results of a subquery of the FederatedQuery 19 submitted to a specific native datastore 9 associated with the federated datastore 37 (Col. 13, lines 44-49). As seen, from the federated datastore 37 as *the given federated data source, data is retrieved from a plurality of datastores* by using FederatedQuery 19. As shown in FIG. 6 is the structure of datastore 9, which could have data from other datastores 9 as *data from one or more*

terminal data repositories. The result of SQL query is a collection 1 of objects containing Dynamic Data Objects 28, which has a reference to another DDO 28 or XDO 22, or a collection of DDOs 28 or XDO 22s. The collection may form a tree structure for representing an object-oriented view of relational databases. The result of DL query is a collection of Dynamic Data Object Document or Folder (FIG. 6, Col. 10, lines 24-31). As seen, data from datastore DB2 is *data, with a schema structural view of the data, from one or more other federated data sources*, and data from DL Datastore is *data, without a schema structural view of the data, from one or more search gateway data sources*. Chang further discloses federated datastore 37 combines several heterogeneous datastores 9 into a consistent and unified conceptual view. This view, or a federated schema, is established via schema mapping of the underlying datastores. The users interact with a federated datastore 37 using the federated schema, without needing to know about the individual datastores, which participate in the federated datastore 37 (Col. 40, lines 28-37). In other words, federated datastore 37 as *the given federated data source providing a unified conceptual view as unified structural view of several heterogeneous datastores 9, which has (a) the data from the plurality of datastores, (b) the data from the terminal data repositories, and (c) the data and schema structural view from the other federated data sources*.

Regarding to claims 2, 9 and 16, Chang teaches all the claimed subject matters as discussed in claims 1, 8 and 15, Chang further discloses *each search gateway data source searches for data in one or more other data sources* (Col. 2, lines 16-50).

Regarding to claim 3, 10 and 17, Chang teaches all the claimed subject matters as discussed in claims 1, 8 and 15, Chang further discloses *each federated data source, each terminal data repository, and each search gateway data source is represented by a data object* (FIG. 6, Col. 10, lines 24-31).

Regarding to claims 4, 11 and 18, Chang teaches all the claimed subject matters as discussed in claims 3, 10 and 17, Chang further discloses *each data object is based on a class that inherits the properties of a base datastore class* (FIG. 3, Col. 8-9, Col. 22, lines 16-42).

Regarding to claims 5, 12 and 19, Chang teaches all the claim subject matters as discussed in claims 4, 11 and 18, Chang further discloses *each data object is manipulated via methods of the class on which the data object is based* (Col. 22, line 16-Col. 30, line 5).

Regarding to claims 6, 13 and 20, Chang teaches all the claim subject matters as discussed in claims 1, 8 and 15, Chang further discloses the step of *submitting a search gateway query from the given federated data source to each search gateway data source* (FIG. 6, Col. 10, lines 24-31).

Regarding to claims 7, 14 and 21, Chang teaches all the claim subject matters as discussed in claims 1, 8 and 15, Chang further discloses *each terminal data repository*

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and each search gateway data source may be queried for data directly (FIG. 6, Col. 10, lines 24-31).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q PHAM whose telephone number is 703-605-4242. The examiner can normally be reached on Monday through Friday.

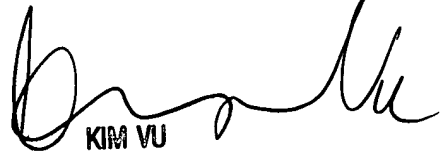
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KIM Y VU can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Hung Pham
September 9, 2003


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100